

Contact Time	2 x 1.5 hours lectures per week 1 x 2 hours lab per week
Format	Lectures and Labs
Class Assessment	Lab Assignments (6): 60% Tests (2): 30% Attendance in Labs and Lectures: 10%

COURSE OVERVIEW

This course proposes to give students a general introduction to the main topics of Geographical Information Science as well as practical experience in industry standard GIS software, namely Esri's ArcGIS Pro. Understanding the sources of GIS data and its accuracy is emphasized throughout the course, as is the ability to solve geographical problems using GIS techniques. Datasets will be drawn from regions across the world, as well as Canada.

COURSE TOPICS

- The Geospatial Computing Environment
- The Vector Data Model
- The Raster Data Model
- Data Editing and Geospatial Databases
- Geodesy and Coordinate Reference Systems
- Satellite Positioning and Field Data Collection
- Spatial Analysis and Geostatistics
- Cartography and Geospatial Data Visualization
- Terrain Data and Terrain Analysis

This course is a core course for the Certificate in Geographic Information Science

COURSE READINGS

No textbook is required. Links to readings in PDF format will be provided by the instructor as needed.